

# ARK-1124U

## Intel Celeron N3350 DC SoC With Dual LAN/ Four USB 3.0/M.2/TPM IoT Gateway Modular Fanless Box PC

**NEW**



### Features

- Intel Celeron N3350 Dual Core SoC
- VGA Display/2x RS-232/422/485/4x USB 3.0
- 1 x Full-size miniPCIe with SIM holder for communication module
- 1 x M.2 E-key for WIFI module
- 20 ~ 60 °C extended operating temperature
- TPM 2.0 default built-in
- 12V lockable DC jack power input
- Optional 12~24V power module (Dual Layer)
- Advantech iDoor module compatible (Dual Layer)
- Advantech WISE-PaaS/RMM support



WISE-PaaS/RMM

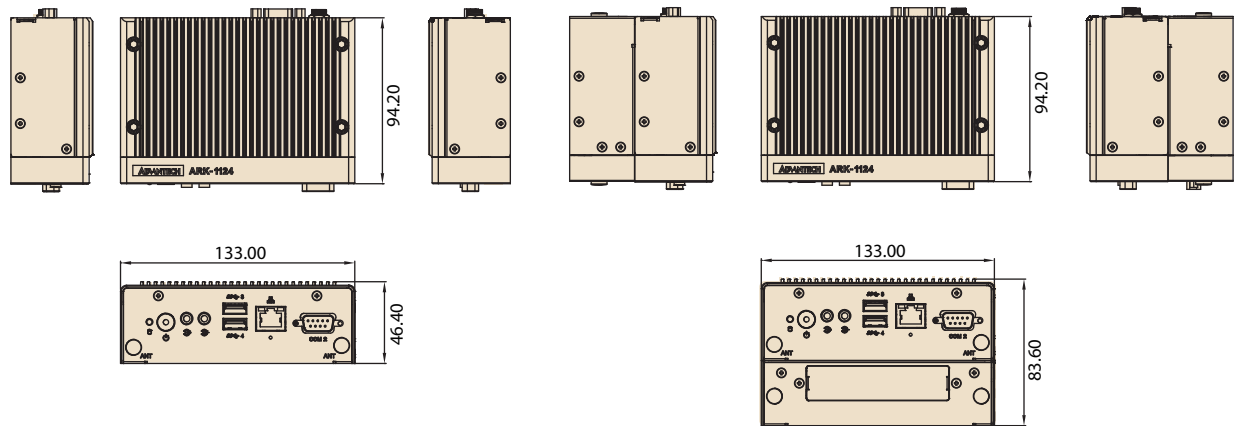


### Specifications

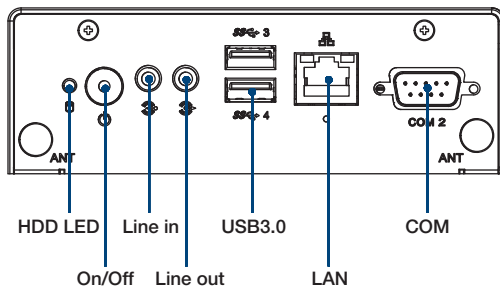
|                   |                            | ARK-1124U-S1A1E   |
|-------------------|----------------------------|---|
| Processor System  | CPU                        | Intel® Celeron® N3350 Dual Core SoC   |
|                   | Frequency                  | 1.1GHz, turbo burst 2.4 GHz   |
|                   | L2 Cache                   | 2 MB  |
|                   | BIOS                       | AMI EFI 64 bit  |
| Memory            | Technology                 | DDR3L 1866 MHz  |
|                   | Max. Capacity              | 8 GB  |
|                   | Socket                     | 1 x 204-pin SO-DIMM   |
| Graphics          | Chipset                    | Intel® HD Graphics 500  |
|                   | Graphic Engine             | 4K Codec Decode& Encode for H.264, MPEG2, MVC, VC-1, WMV9, H.265 / HEVC, VP8, JPEG / MJPEG  |
|                   | VGA                        | Up to 2048 x 1280 @ 60Hz  |
| Ethernet          | LAN1                       | 10/100/1000 Mbps Intel i210 GbE, support Wake On Lan  |
|                   | LAN2                       | 10/100/1000 Mbps Intel i210 GbE, support Wake On Lan  |
| Audio             | Interface                  | Realtek ALC888S, High Definition Audio. Line-out,,Line-in   |
| IO Interface      | Serial Ports               | 2 x RS-232/422/485 port with auto flow control  |
|                   | USB Interface              | 4 x USB 3.0   |
| Other             | Watchdog timer             | 255 levels timer interval, setup by software  |
|                   | TPM                        | Infineon SLB9665XQ 2.0  |
| Expansion         | Mini PCIe                  | 1 x full-size mPCIe for WLAN/WWAN with SIM holder   |
|                   | M.2                        | 1 x M.2 E-key for WIFI (by CTOS or T-PN)  |
|                   | iDoor                      | 1, optional (2nd layer)   |
| Storage           | HDD/SSD                    | Supports 1 x SATA III Drive Bay (Compatible with 9.5mm height)  |
| Software Support  | Microsoft Windows          | Win 10 IoT Enterprise LTSB  |
|                   | Linux                      | Support by project  |
| Power Requirement | Power Type                 | AT/ATX  |
|                   | Power Input Voltage        | 12V <sub>DC</sub> (Optional 12~24V power module)  |
|                   | Minimum Power Input        | 12 V, 5 A   |
|                   | Power Adapter              | AC to DC, DC12 V/5 A, 60 W with lockable DC Jack  |
| Power Consumption | Typical                    | 5W  |
|                   | Max.                       | 33.7W   |
| Mechanical        | Construction               | Aluminum housing  |
|                   | Mounting                   | DIN-Rail/Wall/VESA Mounting Kits (Optional)   |
|                   | Dimensions (W x H x D)     | 133 x 46.4 x 94.2mm (5.24" x 1.83" x 3.71")   |
|                   | Weight                     | 0.7 Kg (1.55lb)   |
| Environment       | Operating Temperature      | With extended temperature peripherals: -20 ~ 60 °C (-4 ~ 140 °F) with 0.7m/s air flow<br>With 2.5-inch hard disk 0 ~ 40 °C (32 ~ 104 °F) with 0.7m/s air flow |
|                   | Storage Temperature        | -40 ~ 85 °C (-40 ~ 185 °F)  |
|                   | Relative Humidity          | 95% @ 40 °C (non-condensing)  |
|                   | Vibration During Operation | With SSD: 3 Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 1 hr/axis<br>With HDD: 0.5Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 1 hr/axis                           |
|                   | Shock During Operation     | With SSD: 30 G, IEC 60068-2-27, half sine, 11 ms duration<br>With HDD: 10G, IEC 60068-2-27, half sine, 11 ms duration   |
|                   | EMC                        | CE/FCC Class B, CCC, BSMI   |
|                   | Safety Certifications      | UL, CB, CCC, BSMI   |

## Dimensions

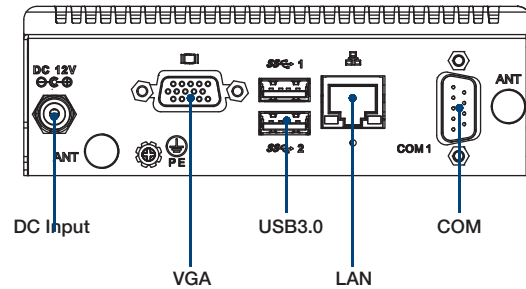
Unit: mm



### Front Panel External I/O Mechanical Layout/Drawing



### Rear Panel External I/O Mechanical Layout/Drawing



## Ordering Information

| Part No.        | CPU                                | RAM       | VGA | GbE | USB 3.0 | RS-232/422/485 | Audio               | Full-size MiniPCIe | SIM | M.2 | 2.5" SATA III HDD Bay | Power Input        | Operating Temp. |
|-----------------|------------------------------------|-----------|-----|-----|---------|----------------|---------------------|--------------------|-----|-----|-----------------------|--------------------|-----------------|
| ARK-1124U-S1A1E | Intel Celeron N3350<br>1.1 GHz Soc | Up to 8GB | 1   | 2   | 4       | 2              | Lin-out,<br>Line-in | 1                  | 1   | 1   | 1                     | 12 V <sub>DC</sub> | -20 ~ 60 °C     |

Note: Memory, storage and operating system bundled by request.

## Packing List

| Part Number    | Description                                   |
|----------------|---|
| -              | 1 x ARK-1124U Unit                            |
| -              | 1 x User Manual (Simplified Chinese)          |
| 96PSA-A60W12W6 | 1 x A/D 100-240V 60W 12V C14 LOCKABLE DC PLUG |
| -              | LAN clip                                      |
| -              | Wrench for top cover                          |

## Optional Item for Default SKU

| Part Number | Description                           |
|-------------|---------------------------------------|
| 1702002600  | Power cable 3-pin 183cm, USA type     |
| 1702002605  | Power cable 3-pin 183cm, EU type      |
| 1702031801  | Power cable 3-pin 183cm, UK type      |
| 1700000237  | Power cable 3-pin 183cm, PSE type     |
| AMK-W001E   | ARK-112X series Wall mounting kit     |
| AMK-V003E   | ARK-112X series VESA mounting kit     |
| AMK-R001E   | ARK-112X series DIN-rail mounting kit |

## Optional Embedded OS

| Part Number | Description                        |
|-------------|------------------------------------|
| 2070015302  | Win10 IoT Ent LTSB 2016 64bit, ENG |

# ARK Plus Extended Modules

## ARK-1 124 Dual Layer Expansion Option Items

### Expansion Kit Selection



AMO-1101 and iDoor



AMO-1101 and AMO-P011

### Ordering Information

#### Optional ARK Plus Mechanical Kit

| P/N      | Description                            |
|----------|--|
| AMO-1101 | Mechanical kit for 2nd layer expansion |

#### Optional iDoor Expansion

| Part Number     | Description                                     |
|-----------------|---|
| MOS-2230-Z1201E | CANBus module, 2-Ch, USB Interface              |
| MOS-2220-X1101E | Parallel LPT module, 1-Ch, USB Interface        |
| MOS-2110Z-1201E | USB module, 2-Ch, PCIe Interface                |
| MOS-2120-Z1101E | Giga LAN Ethernet module, 1-Ch, PCIe Interface  |
| MOS-1130Y-0201E | Isolated CANBus, 2-Ch, DB9, PCIe Interface      |
| MOS-1110Y-0101E | Isolated 16 DI/8 DO, 1-Ch, DB37, PCIe Interface |
| MOS-2220-Z1101E | High Speed COM module, 1-Ch, USB Interface      |
| MOS-1120Y-0202E | Isolated RS-232, 2-Ch, DB9, PCIe I/F            |
| MOS-1121Y-0202E | Isolated RS-422/485, 2-Ch, DB9, PCIe I/F        |
| MOS-1120Y-1402E | Non-Isolated RS-232, 4-Ch, DB37, PCIe I/F       |
| MOS-1121Y-1402E | Non-Isolated RS-422/485, 4-Ch, DB37, PCIe I/F   |
| MOS-2120-Z1201  | Dual Intel I210 GbE LAN, 2-Ch, PCIe I/F         |

#### Optional 12-24V DC Power module

| Part Number      | Description   |
|------------------|---|
| AMO-P011         | 12-24V DC input power module<br>Operating temp. -20~60 °C |
| 96PSA-A60W12P2-1 | AC to DC ADP, 12V/5A 60W (for AMO-P011)                   |
| 1702002600       | Power cord 3-pin 183cm, USA type                          |
| 1702002605       | Power cord 3-pin 183cm, EU type                           |
| 1702031801       | Power cord 3-pin 183cm, UK type                           |
| 1700000237       | Power cable 3-pin 183cm, PSE type                         |

\* For iDoor module expansion, please order AMO-1101 and iDoor P/N

\* For Wide range power module expansion, please order AMO-1101 and AMO-P011

\* For iDoor and wide range power module expansion, please order AMO-1101, iDoor P/N and AMO-P011

\* Dual layer mounting kit is same as single layer



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- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

**Телефон:** 8 (812) 309 58 32 (многоканальный)

**Факс:** 8 (812) 320-02-42

**Электронная почта:** [org@eplast1.ru](mailto:org@eplast1.ru)

**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.